

The Menstrual Cycle

Menstruation, or having periods, begins during puberty.

A menstrual cycle is the time from the beginning of one period to the beginning of the next.

When a person has a period, blood and fluid leaves the body through the vagina.

In every menstrual cycle:

- The uterus gets ready to be pregnant. Its lining grows thicker to prepare for a fertilized egg.
- About 14 days before a period starts, one of the two ovaries releases a ripe egg into the fallopian tube. This is called ovulation.
- The egg travels down the fallopian tube to the uterus. When the egg isn't fertilized, it begins to fall apart.
- The egg and the lining leave the uterus through the vagina during the period.

When will my period start?

People have their own personal time clocks. Some people start their periods as early as age 9. Others don't start until age 16. It's common for periods to be unpredictable when you first start to have them. Many people skip a few periods the first year or so after they start. After awhile, your body will settle into a pattern that will become more familiar.

Most people have a period about once a month.

Periods usually last 3–7 days. Sometimes they are longer or shorter. It may seem like a lot of blood. But only about 4–8 tablespoons of fluid leaves the body during a period.

Menstrual cycles can be many different lengths. Some are as short as 22 days. Others are as long as 40 days. The length of a cycle may change a little from month to month.



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The Role of Hormones

The menstrual cycle is controlled by hormones.

Hormones are chemicals made by the body. They carry messages from one part of the body to other parts.

The ovaries start making these hormones during puberty. During puberty, female hormones signal breasts to grow. They tell the body to grow underarm and pubic hair.

The 2 main female hormones are estrogen and progesterone.

- Estrogen tells the ovaries to release a ripe egg.
- Progesterone helps the uterus prepare for a possible pregnancy.

Levels of estrogen and progesterone drop near the end of the menstrual cycle. The low hormone level signals for the period to start.

If a person gets pregnant, the body makes pregnancy hormones.

- Pregnancy hormones tell the breasts to get ready to make milk.
- They help all parts of the body adapt to being pregnant.
- They tell ligaments to relax so the body will be able to deliver a baby.



Everybody has hormones

- Estrogen and progesterone (the female sex hormones) are present in women and men. But the female reproductive system makes about 10 times more estrogen and progesterone than the male system.
- Testosterone (the male sex hormone) is present in women and men. The female reproductive system makes this hormone, but the male system makes about 10 times more testosterone than the female one does.

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The Reproductive System

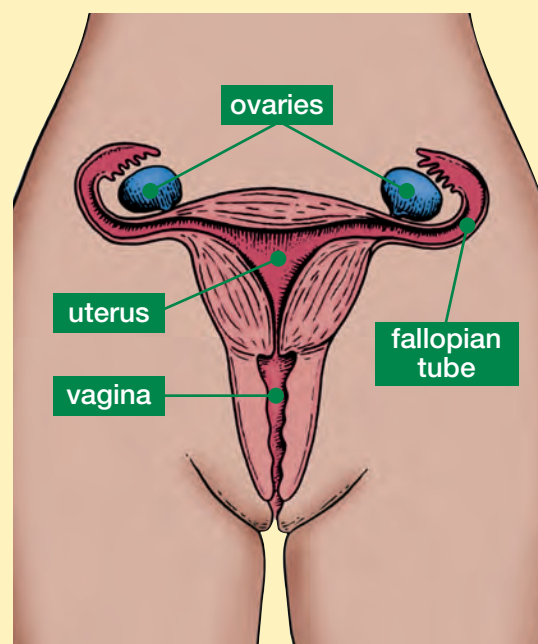
The reproductive system makes it possible to get pregnant.

It starts with puberty.

The female reproductive system starts working during puberty.

Puberty is when a child's body changes to an adult body. A person becomes able to get pregnant and have a baby. This is usually between age 9 and 16.

The female reproductive system includes the **uterus**, **fallopian tubes**, **ovaries**, **vagina** and **breasts**.



internal organs
front view

How pregnancy happens:

- When people have vaginal intercourse, the penis enters the vagina. During ejaculation, the penis releases millions of tiny sperm.
- The sperm travel up through the vagina, into the uterus and some enter the fallopian tubes.
- If a ripe egg is in one of the tubes, a single sperm may enter it. When the sperm and egg combine, it's called **fertilization**.
- If a fertilized egg travels to the uterus and attaches to the thick lining then the person is pregnant.
- The uterus provides a safe place where the egg can develop during pregnancy. In about 9 months, a baby will be born.



Talking with your parent can help you understand more about changes during puberty.

1

Your pelvic exam

Once people reach age 21, they should have regular pelvic exams. During the exam, a doctor checks the female reproductive organs. This is a normal part of taking care of your body.

You and your doctor can decide how often you need a pelvic exam.

Female facts



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Title No. 193 [18-0822]

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Inside the body

Reproductive organs inside the body make it possible to have a baby.

Uterus

- The uterus is where the fertilized egg grows and develops during pregnancy.
- It's about the size of a fist, and shaped like a pear.
- The uterus is one of the strongest muscles in the body. It has to be strong to push a baby out during childbirth.
- The inside walls of the uterus have a blood-rich lining that feeds the fetus during pregnancy.
- When a person isn't pregnant, the inside walls of the uterus touch each other. But during pregnancy, they spread apart to make room for the fetus.

Vagina

- The vagina is a muscular tunnel that connects the uterus to the outside of the body.

The vagina does 3 things:

- It provides a way for menstrual fluid to leave the body.
- It can receive a penis during intercourse.
- It provides a way for a baby to leave the body.
- The walls of the vagina have glands that produce fluid that keeps the vagina moist and clean. When a person is sexually excited, the amount of fluid increases. This makes it easier for the penis to enter the vagina.

Cervix

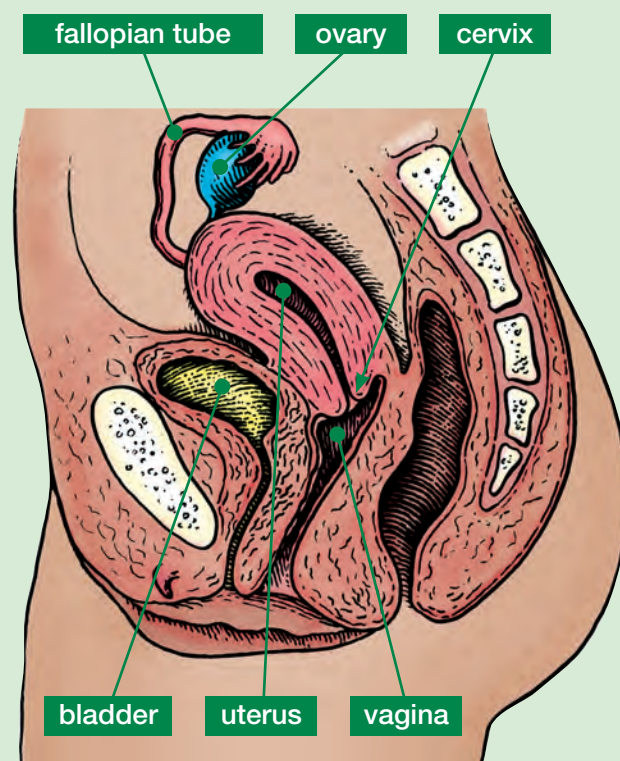
- The cervix is the short end of the uterus that connects it to the vagina.
- During pregnancy, it stays tightly closed. It makes a special mucus that helps keep bacteria out of the uterus.

Fallopian Tubes

- These two tubes come out of each side of the uterus. They are about 5 inches long and as big around as a strand of spaghetti.
- An egg travels from the ovary through a fallopian tube into the uterus. If a sperm joins with an egg, it happens in one of the fallopian tubes.

Ovaries

- Ovaries are about the size and shape of an unshelled almond. They are at the end of each fallopian tube.
- Ovaries make female hormones. They also hold eggs.
- At birth, ovaries contain more than 300,000 egg cells. During the years a person can get pregnant, about 500 of these eggs will eventually ripen and be released.
- The ripe egg is as small as the point of a needle. It has only about 24 hours in which it can be fertilized.



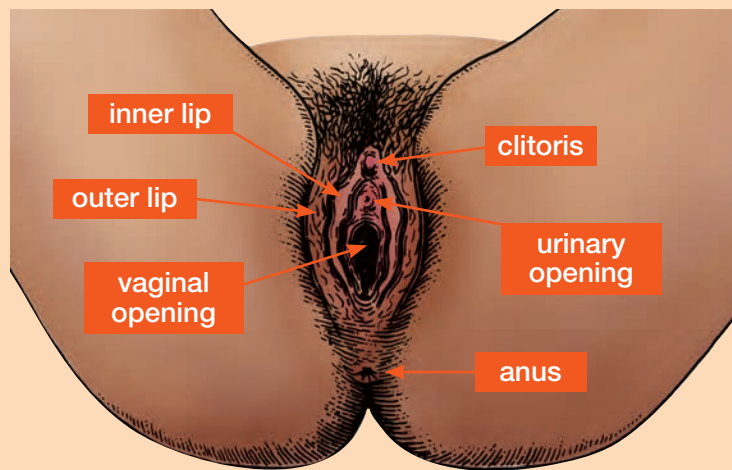
internal organs
side view



The female reproductive system grows and changes during puberty.

Outside the body

Reproductive organs outside the body are called genitals.



external organs

The genital area is called the vulva.

- The **outer lips** (labia majora) are folds of skin and fatty tissue. They cushion and protect the vaginal opening.
- Between the outer lips are the **inner lips** (labia minora). They are sensitive to sexual pleasure. When stimulated, they get deeper in color and swell.
- The **clitoris** is an organ full of nerve endings located near the front of the vulva. Only the pea-shaped tip of the clitoris can be seen outside the body. The rest of the clitoris is inside the body and is about 5 inches long. It becomes firmer and swollen when a person is sexually excited and provides sexual pleasure.

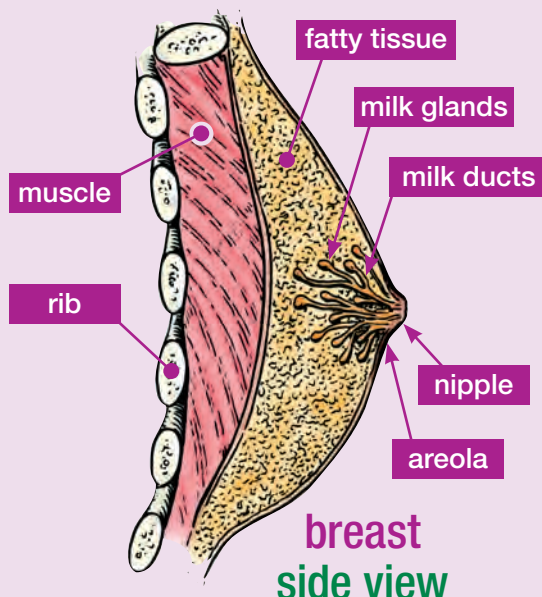
There are 3 openings in the female genital area.

- The **urinary opening** is where urine, or pee, comes out.
- The **vaginal opening** is where menstrual fluid or a baby leaves the body. It is where the penis enters the body during vaginal intercourse.
- The **anus** is where a bowel movement leaves the body. Because the anus is close to the vagina, it's possible for bacteria from bowel movements to get inside the vagina. To prevent this, people can wipe from front to back and wash the genital area gently every day.

The breasts

A woman's breasts are also reproductive organs.

- The breasts contain **milk glands** that produce milk, and **milk ducts** that carry the milk to the nipple.
- The milk glands and ducts are surrounded and protected by **fatty tissue**.
- After giving birth, hormones tell the breasts to make milk.
- On the outside of the breast is the **nipple**. It is surrounded by a circle of darker colored skin. This is the **areola**.
- Breasts come in many sizes and shapes. It's even normal for one breast to be larger.
- Breasts of all sizes can produce enough milk to nurse a baby.



breast
side view

Take care of your breasts

- Know your own breasts. Many people learn how their breasts normally look and feel so they can report any changes. Talk with your health care provider about the best way to be aware of breast changes.
- Have regular breast exams by your provider. Regular exams every 1 to 3 years are recommended for people in their late 20s and 30s.
- After age 40, exams are recommended every year. Ask your provider about regular mammograms (special breast x-rays).

Most breast lumps that occur before menopause are not cancer. Many are due to normal changes in the menstrual cycle.